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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/540,648	03/31/2000	Paul G. Skuriat	20558-011	1725

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MINTZ, LEVIN, COHN, FERRIS, GLOVSKY  
AND POPEO, P.C.  
ONE FINANCIAL CENTER  
BOSTON, MA 02111

EXAMINER
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GREENE, DANIEL LAWSON

ART UNIT	PAPER NUMBER
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3694

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/20/2006	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

# Office Action Summary

Application No.

09/540,648

Applicant(s)

SKURIAT ET AL.

Examiner

Daniel L. Greene Jr.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 18 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-8, 10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. Claims 1-8 and 10-14 are pending. Claims 1-8 and 10-12 have been amended in the communication filed 9/18/2006.

***ABSTRACT***

2. The Abstract received 9/18/2006 is acknowledged and acceptable. Accordingly, the Objection to the Abstract set forth in section 3 of the previous Office action mailed 5/18/2006 is hereby withdrawn.

***Claim Objections***

3. Claim 10 is objected to because of the following informalities: Claim 10 appears to have the word "first" misspelled in line 10. Appropriate correction is required.

***Response to Arguments***

4. Applicant's 9/18/2006 response to the rejections set forth in section 5 of said previous Office action have been fully considered and are persuasive. Accordingly said rejections from said section 5 are hereby withdrawn.

5. Applicant's arguments received 9/18/2006 regarding section 6 of said previous Office action have been fully considered and are persuasive. Therefore, the rejection of said section 6 has been withdrawn. However, upon further consideration, a new ground

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of rejection is made in view of Hawkins, Ordish and the definition of Six Sigma as explained in more detail below.

6. Applicant's invention is directed towards an improvement over the invention set forth in U.S. Patent 5,497,317 (incorporated by reference in the specification as filed page 4, line 15). The improvement being the act of measuring the difference in time between successive steps in the process of closing a trade and then using these time differences to generate a "measure-of-performance" wherein the shorter period of time between steps indicates a better performance. As explained below, applicant's inventive concept appears to be nothing more than the application of well-known business practices to a preexisting technology or business method.

***Claim Rejections - 35 USC § 103***

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. **Claims 1-8 and 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,029,146 to Hawkins et al. (hereafter Hawkins) in view of both U.S. Patent 5,727,165 to Ordish et al. (hereafter Ordish) AND the definition of Six Sigma obtained from Answers.com and further in view of U.S. Patent 6,119,097 to Ibarra.**

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Hawkins sets forth a device and method of improving the speed and reliability of security trade settlements including the motivation to increase the speed and accuracy of settling an executed trade, (reads on post-trade) in, for example, the abstract, col. 1, lines 18-33 and 65+, col. 2 lines 1-7 and 42+, col. 3 lines 1-5, col. 4 lines 24-47, etc.

Hawkins explicitly sets forth beginning in col. 1 lines 18, "To meet these challenges and improve profitability, financial institutions **will need to re-engineer business processes to increase efficiency**, automate to reduce costs and expedited settlement and move towards proactive risk management." (Emphasis added)

Hawkins sets forth a system providing a trade management process, said trade management process including transmitting trade-related information between said participants, said system comprising:

a trade management system configured to receive at least two post-trade communications including first and second communications Col. 2 lines 42-col. 3 line 23), at least said first communication is from a first participant to said trade management process, each of said first and second communications including information associated with one or more steps in a process for closing a trade (col. 3 lines 1-5);

a database configured to store time-of-completion information (col. 4 lines 33-47) including at least one time-of-completion value representative of a time of completing at least a selected step of said steps in a process for closing a trade

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measured from a start time, wherein said time-of-completion value is recorded when said first communication is received by said trade management system; and

Hawkins does not appear to expressly disclose a processor configured to generate a post-trade measure of performance, with respect to said first participant, as a function of a difference between said start time and said time-of-completion, said measure of performance being a function of a time elapsed between completion of successive ones of said steps in said process for closing a trade nor does it expressly disclose providing a measure of performance.

Hawkins does however expressly set forth motivations to "re-engineer business processes to increase efficiency...expedite settlement, and move towards proactive risk management.", "settlement failures...has been estimated at as much as 30%" and that "delays in achieving confirmation are costly...reducing the profit margin on these transactions."

Ordish sets forth an improved matching system for trading instruments in which automatically confirmed trades is dependent on receipt of match acknowledgement messages by the host computer from all counterparties to minimize losses due to broken trades in, for example, the abstract, col. 1 lines 25-33, col. 2 lines 19-29, col. 3 lines 28-42, col. 4 lines 8-18 and 57+, etc.

The definition of Six Sigma from Answers.com sets forth an old and well-known methodology (see page 4 "Origin") of improving business practices regardless of industry including banking, marketing, etc. in it's entirety.

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Specifically page 2 sets forth "Bank of America has used Six Sigma for...customer satisfaction improvement..." and under Methodology, "DMAIC is used to improve existing business process" wherein DMAIC stands for Define, Measure, Analyze, Improve and Control.

Hawkins clearly sets forth applicant's invention as disclosed above, Although Hawkins sets forth communications and messages sent back and forth in the execution of trading, Ordish is cited as further evidence that communications between parties are indeed sent back and forth as the steps towards executing the trades are completed and that these communications are recorded in a data base and time date stamped and that even an alarm is generated (see col. 10, lines 40-45) if messages are not received within a predetermined time interval.

As set forth above, Hawkins sets forth motivation to "re-engineer business processes", Six Sigma sets forth a methodology to apply to business processes, BOTH Hawkins and Ordish set forth the importance of time and lapses thereof in the execution of trades.

Ibarra is cited as teaching it is known for computer systems to monitor the performance of individuals (see, for example, col. 11 claim 1, lines 11-57). Applicant's claims are basically directed towards measuring the length of time it takes for participants to generate messages and then assigning a measure to grade their performance. Ibarra is not specifically directed towards closing trades, per se, as much as a general formula to be applied to any trade/industry

wherein the performance of individuals needs, or is wanted, to be measured.

However, Ibarra can be considered as disclosing applicant's claimed inventive concept, i.e. to measure the time elapsed between receiving a first message (e.g. execute my order) and getting a response (e.g. order executed) and assigning a measure of performance based upon how short that time difference is.

Accordingly, at the time of the invention, it would have been obvious to one of ordinary skill in the art to apply the teachings of Hawkins himself, Ordish, Six Sigma and Ibarra to the trade management system of Hawkins to include a method of measuring performance of participants to a trade management process for the benefits of expediting settlement, increasing profit margin, quantifying human job performance, identifying problem areas (either personnel or supporting equipment), and increasing efficiency as such measurement allows for the improvement and optimization of the process and as such is no more than the application of the Six Sigma Methodology to applicants previous invention.

Claims 2 and 10-14 recite various limitations defining exactly when or where the measurements of performance are measure from, however these limitations are nothing more than design choices and would be obvious to one of ordinary skill to select any time they wish to compare with other times in order to define an area needed for improvement, again Six Sigma sets forth the methodology "DMAIC" and these precise locations of measurements fall within the teachings of Six Sigma.



Claims 5-9 set forth a system performing the method as explained above and as such are rejected for the same reasons.

Although none of the references show the specific limitations set forth in the claims, the claims themselves do not appear patentable as they are directed towards improving a specific process using specific points of measure that would be obvious to one of ordinary skill when applying the methodology of Six Sigma. Again, In other words it appears applicant is requesting a patent based on the application of Six Sigma to his own invention.

### ***Conclusion***

9. **Examiner's Note:** Examiner has cited particular columns and line numbers in the references as applied to the claims for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant, in preparing the responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ameritrade article "Ameritrade reinforces commitment to best execution with 10 second guarantee." sets forth trading companies concerned with minimizing trade execution time.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel L. Greene Jr. whose telephone number is (571) 272-6876. The examiner can normally be reached on Mon-Fri 8:30am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James P. Trammell can be reached on (571) 272-6712. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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